Spin meeting minutes, 4/25/2007

Nick showed the expected radial shift for pushing horizontal tune above 8.95. The MAD calculation says that the radius needs to be shifted inward 12mm. The calculation was done for a lattice with two partial snakes in and a three fold symmetry in dispersion function is seen. Thomas suggested to do a similar calculation for lattice without snakes. In real machine, the horizontal tune has been pushed as high as 8.945 with sextupoles off. For the AGS with sextupoles off, the horizontal chromaticity is about -20 and vertical chromaticity is close to zero.

Haixin showed a plot of spin tune of AGS with the combination of 14% and 5.9% partial snakes. The spin tune gap for $G\gamma = 43$ and 44 would be 0.939 to 1. If $\Delta p/p = \pm 10^{-3}$, then the tune spread would be 0.02. The horizontal tune has to be pushed as high as 8.96. Thomas asked about coupling when pushed the two tunes close to 9. Woody measured the horizontal response from vertical kick. The coupling is small. Leif pointed out that skew quads were on and the settings were optimized for gold beam, but should work for protons. We will soon check high tune lattice with snakes on.

Haixin